



THOUGHTS ON

MEDIUM

OR

MOTORIZED FORCES

Lieutenant Colonel Thomas R. Rozman

In response to a changing world, our military requirements are now being reviewed. The emerging outline of our future ground force is one of smaller organized force levels, both Active and Reserve Component, that must be responsive over the full spectrum of intensity.

Although this force must continue to be able to deploy and to execute the most intense kind of ground battle we can foresee, it is most likely to be applied at the middle or low end of the conflict spectrum. This means we must have a substantial ground force that is strategically deployable by the available strategic movement assets (for quick response, by aircraft; for long term sustainment, by ship).

Once deployed, these forces will have to be able to operate effectively, on both an operational and a tactical level, against forces that range from medium to small regular military establishments with sophisticated and significant heavy forces to the military and paramilitary arms of political movements or criminal elements.

How does the Army fight on such an array of possible battlefields against such a range of threats? How do we develop, organize, man, and equip a smaller organized Active Army and Reserve establishment?

Although the answers are not yet clear, indications are that

the force structure may consist of a collection of more specialized maneuver and supporting forces capable of operating as efficient combined arms force packages when they are deployed.

One of the real issues facing the force developers is determining how light infantry units can be integrated with heavy forces or equipped to compete on high intensity battlefields and still be strategically deployable to other areas where we have no forward deployed forces and where we expect to encounter sizable heavy forces.

The answer may lie in two alternatives. One of these might be to develop an augmentation package for light forces designed to give them the equipment, support, and doctrine they will need when they deploy to theaters that require more organic operational and tactical mobility and weapons and other system capabilities than they possess.

The other alternative might be to create a maneuver force permanently organized to operate between the extremes of high and low intensity conflict. This force would be able to team with a heavy force in a non-linear environment to release scarce heavy force elements from such missions as the security of critical lines of communication, denial of terrain, economy of force, and other "corps fire brigade" requirements.

This force would also be more responsive strategically for "stiffening" light force elements. It would be rapidly deployable and highly mobile, and it would have organic weapons capable of defeating enemy heavy forces in contingency theaters. Such a force would be a motorized or "medium" force.

Off and on during the past 50 years, the Army has dabbled with the idea of creating motorized formations. In fact, motorized divisions mounted in "soft-skinned" trucks were part of the force structure during World War II. For many valid reasons, however, the Army has not developed a permanent motorized or medium arm as part of its force structure. The reasons range from issues of battle doctrine and warfighting concepts developed over the past 45 years, to funding constraints, to the Army's internal and external political interests.

Other armies have also considered motorized formations simply because as necessary as heavy forces have been and will continue to be on any high intensity battlefield, they are extremely expensive to develop, sustain, and continuously modernize. Consequently, two conditions have driven various armies to examine the use of motorized formations in their force structure.

First, in conflicts of a year or longer, where a substantial number of heavy forces have been employed, cheaper motorized units have been used for any ground mobile formations required beyond the existing heavy forces. Thus, the expanded requirements for security and strategic reserve forces could be organized on an infantry basis more quickly, efficiently, and affordably. Then, as the equipment became available, these forces could be converted to a motorized or heavy format. In the interim, these infantry formations could be augmented with whatever heavy weapons and transport might be at hand. Too, countries that faced the added challenge of strategic deployment and sustainment typically found themselves making trade-off decisions based on the needs of the operational force structure and the available means of transportation.

Second, countries with limited fiscal resources that required proficient forces with effective organic operational and tactical mobility, as well as a capable array of heavy weapons, have typically considered the option of medium forces. If we read "medium" as "motorized" (wheeled) systems, three sub-aspects are important to understanding this trend:

- Wheeled systems, although traditionally inferior to tracked systems in cross-country trafficability and in their ability to support the heavier armor protection packages (systems weighing more than 21 tons) and larger caliber cannons, nevertheless could be deployed at far less cost. When developed, they could be effective enough for most missions that required organic mobility and heavy weapon augmentation.

- Wheeled systems tended to be significantly less expensive to operate and sustain than tracked systems.

- Wheeled systems were somewhat less sophisticated in their automotive design and running gear, and it was therefore easier to train soldiers to operate them. (This has been a critical concern in the past to countries whose typical soldier was less able mechanically than his brothers from the industrialized nations.)

In recent years, wheeled systems have become increasingly capable in terms of cross country mobility and heavy weapons capability. Currently, there are wheeled armored systems that are reasonably competitive with light to medium tracked systems in tactical mobility and superior to tracks for operational mobility on road networks that are reasonably intact. New developments have made issues associated with indirect fire damage to tires less critical.

The objective of this discussion is not to argue that wheeled systems are a more cost effective alternative to tracked systems for a heavy mounted force. There is currently no superior technological substitute for the cross country tactical mobility of a tracked system—and none is in sight.

My purpose is to show that, given the wider spectrum of conflict that a smaller army may have to respond to, another type of force may better support our growing need for affordable strategic and operational flexibility while at the same time reducing the trade-off of capabilities.

ALL-ARMS MANEUVER FORCE

This force component could be a permanently organized medium or motorized arm mounted on wheeled light armored systems. (This idea has been revisited most significantly in recent times by various concepts tested by the 9th Infantry Division.) It would be an all-arms maneuver force designed to capitalize on its superior organic operational and tactical mobility, staying power with its weight of infantry and heavy caliber weapons mix, and its greater protection over light infantry and "soft-skinned" systems against fragmentation and some small arms. At the same time, this more strategically mobile force would represent a more responsive package for augmenting a light force, at least initially, in a contingency area. Special operations forces and aviation would be integrated as the mission required them and within its format, combat, combat support, and combat service support would be organized into the medium force as appropriate.

What does a medium force bring to the battlefield that is different from what a heavy or light force brings? I have already indicated some general possibilities.

For ease of development, I will start with a medium force on the high intensity battlefield and work down to forces for the lower intensity levels. Also, for purposes of brevity, I will discuss medium force in terms of a separate, all-arms brigade. (It could be a regiment or group, as appropriate to the most current thinking—in other words, an organization of two or more maneuver or line battalions.)

One type of medium brigade might look like the one in Figure 1. This organization is similar to the design of existing separate brigades. It is robust and could conceivably be more streamlined—with two motorized rifle battalions, for example, instead of three, and an assault gun and missile company instead of a battalion. A military intelligence (MI) detachment could replace the MI company.

In fact, the brigade could easily be tailored depending on its contingency mission. If its purpose was to augment forces

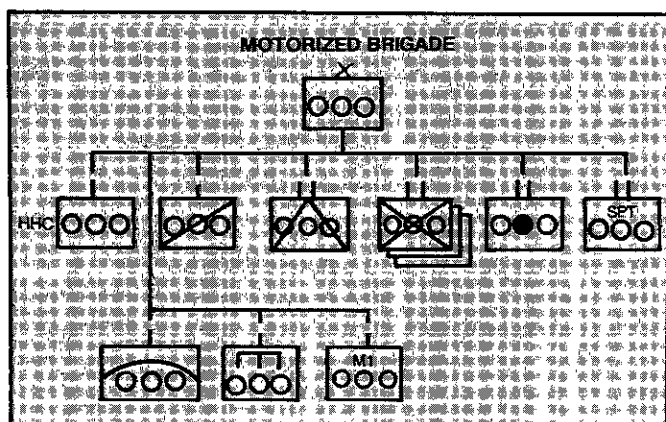


Figure 1

on an intense battlefield, the organization shown would be desirable. If it was oriented on the lower end of the contingency spectrum, it might look like the one in Figure 2.

The organization shown in Figure 1 represents the best one for operating on a non-linear, high intensity battlefield. For purposes of this discussion, the brigade would be mounted on a family of vehicles with capabilities similar to those of the current Marine Corps light armored vehicle (LAV). To allow independent sustained operations, it would combine a balanced weight of all arms (less traditional armor and mechanized infantry heavy assault units). It would contain a mix of heavy weapons.

A force with such capabilities would offer a corps or force commander flexibility in the following areas:

- Conducting economy of force missions.
- Maintaining linear flank integrity.
- Sealing penetrations in linear deployments.
- Shaping penetrations to present counterattack opportunities.
- In non-linear operations, enabling the commander to range forward, to the flanks, or to the rear to delay or deflect forces that might compromise the operational objectives.
- In linear and nonlinear situations, responding quickly and effectively to any threat to lines of communication by a Soviet-type airborne force or other substantial force concentration.

The brigade would also give a corps or force commander a highly mobile and potent self-contained unit that could respond quickly and effectively to missions for which he would otherwise have to use his limited heavy force assets.

The brigade shown in Figure 1 has six combat, combat support, and combat service support battalions as well as five companies of brigade troops. (The reconnaissance, air defense, engineer, and military intelligence elements could be organized into a combat support battalion.)

The motorized infantry battalion would be organized as shown in Figure 3. Its main objective would be to support a large infantry dismount capability. The squad carrier ideally would have a two-man dedicated crew and carry ten to twelve infantrymen. Depending on the organization of a four-vehicle platoon headquarters, this would mean 33 to 39 dismounting infantry soldiers. A three-company battalion, at full strength, would support about 300 to 500 dismounted soldiers. The

brigade would be able to place 900 to 1,050 infantrymen on a piece of terrain.

If the carrier was equipped with an automatic cannon such as the 25mm, it would give the infantry platoon a powerful point target and suppressive fire weapon. Organic medium antiarmor weapons would increase the platoon's armor-killing effectiveness, and the application of direct and indirect fire assets at battalion level would further multiply the infantry's effectiveness.

At battalion level, a support package would be provided to allow such limited independent battalion missions as traditional post and screen missions in a nonlinear environment.

Two key elements from the combat support perspective would be the direct and indirect fire support packages. The ideal would be a mortar platoon of six breech loading turret-mounted 120mm mortars. These weapons would be provided with mortar rounds equipped with improved conventional munition (ICM) packages, as well as with the traditional high explosive, smoke, and marking rounds. The weapons would also be equipped with low velocity, direct fire rounds designed to "bust bunkers" and "sweep" infantry attacks. The latter capabilities might prove particularly useful in built-up areas.

The antiarmor platoon, in its best design, would have a mix of missiles and 105mm assault guns (one example is Benet Laboratory's low recoil system, which has fired from the eight-wheeled LAV used by the U.S. Marine Corps). The guns would provide a responsive, relatively cheap, large-caliber, fire-and-forget capability that would be ideal for the tighter work in built-up areas and compartmented or broken terrain. Where there were opportunities for extended reach, the missile would be employed. Although the missile would initially be an improved TOW, the objective system would be the LOSAT.

The gun-missile platoon would be organized into three two-gun sections and three two-launcher sections. The half platoons (gun and missile) would be commanded by a sergeant first class and the sections by staff sergeants. The second vehicle in a section would be commanded by a sergeant. At platoon headquarters, a senior lieutenant would lead and a senior sergeant first class (a master sergeant might be considered) would assist.

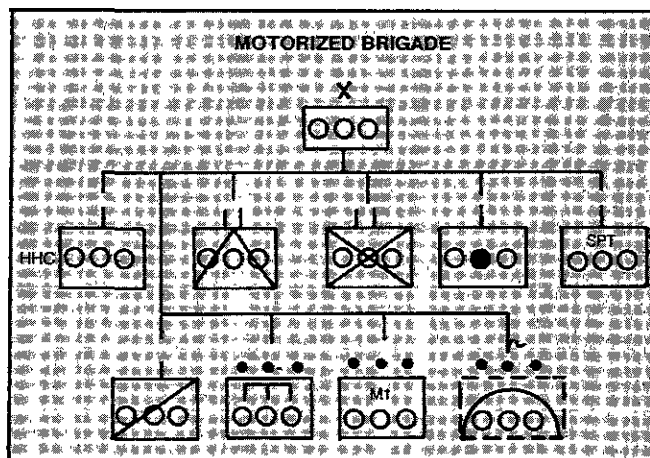


Figure 2

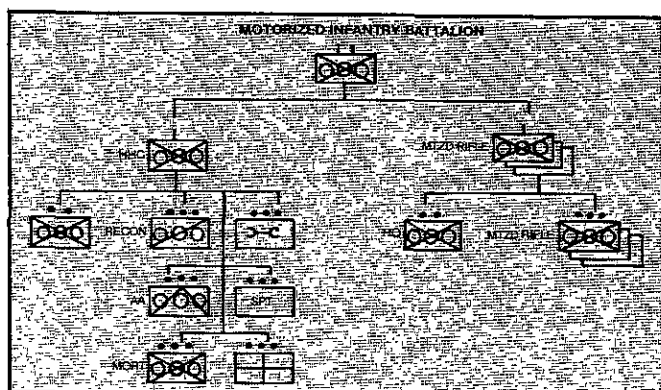


Figure 3

The command and control (C2) of the battalion would be mounted in carriers to provide a more stable, responsive, and survivable C2 capability. Such a C2 structure would also be compatible with those of heavy forces.

The reconnaissance platoon would consist of a headquarters and two two-squad reconnaissance sections; each squad would consist of two vehicles. The desired complement of vehicles would be nine carriers adapted to the reconnaissance function—C2 capabilities, weapon systems, and the like.

An organization for the antitank battalion is shown in Figure 4. This organization indicates a pure assault gun company and a pure missile company, but these could be mixed companies. The platoon organization is not as robust as the one in the motorized infantry battalion. It has three squads of two guns or missile systems for a total of 12 per company. Thus, the battalion has 24 gun vehicles and 24 missile vehicles. Exclusive of medium antiarmor weapon systems (AAWS-M), the brigade would have four large-caliber antiarmor gun and missile systems—a potent direct fire capability for a force designed to make the most of a terrain denial or strongpoint option.

Also shown in Figure 4 are reconnaissance and mortar platoons, which would provide the brigade commander with an additional maneuver battalion headquarters if he chose to task organize that way.

A motorized brigade of this type would be well suited to operate on an intense heavy battlefield as a corps force multiplier. Its potential for operational employment (because of its greater road mobility at speed) would be superior to that of a heavy brigade with less consumption of Class III (petroleum products) and Class IX (spare parts). Therefore, its ability to support a corps commander's operational planning by rapidly occupying widely dispersed terrain across the corps area would underscore its combat multiplier potential at the operational level.

It would also provide a force at tactical level that could place a significant infantry concentration on selected terrain well in advance of an enemy's arrival. This force would be capable of putting up a tenacious fight against the heaviest elements and of withdrawing quickly under pressure employing its organic assets.

When forces were employed in response to the lesser demands of a medium intensity battlefield, the motorized force

would offer a number of advantages. This would be particularly true when the fight took place under the following conditions:

- Prepositioned equipment was not available.
- U.S. bases did not exist.
- Strategic mobility assets would have to be relied upon for deployment and sustainment.
- A significant number of heavy or motorized forces would be encountered (two or more battalions).

The mix of light and medium forces in the task organization would depend upon where the anticipated fight fell on the conflict spectrum. The light elements would probably constitute the bulk of the force and would be the most strategically responsive elements. However, a motorized force such as the one discussed here could be deployed almost as quickly to reinforce the light units and to improve the ground mobility of the task force and provide supporting large-caliber direct fire systems. The necessary heavy force elements could reinforce them later.

For such operations as these, the reduced organization shown in Figure 2 might be more useful. This suggests maintaining two types of motorized brigades, or possibly tailoring the brigade from a fixed organization; the latter would probably be the more logical approach.

Another recourse might be to maintain a standard table of organization and equipment (TOE) with brigades that were oriented toward high intensity theaters being organized to full TOE while those oriented toward contingency missions might look like the one in Figure 2. Also anticipated would be the organization of battalion task forces or battle groups from brigade assets specifically tailored to a particular contingency that did not require the full brigade.

There are also other alternatives. It is possible that medium forces could employ light tracked systems such as the M113 and its variants. Tracked systems, however, are not well suited to regular movements over long distances at speed—60 or 70 miles at speeds of 45 to 55 miles per hour—without making significant claims on Class III and Class IX supplies.

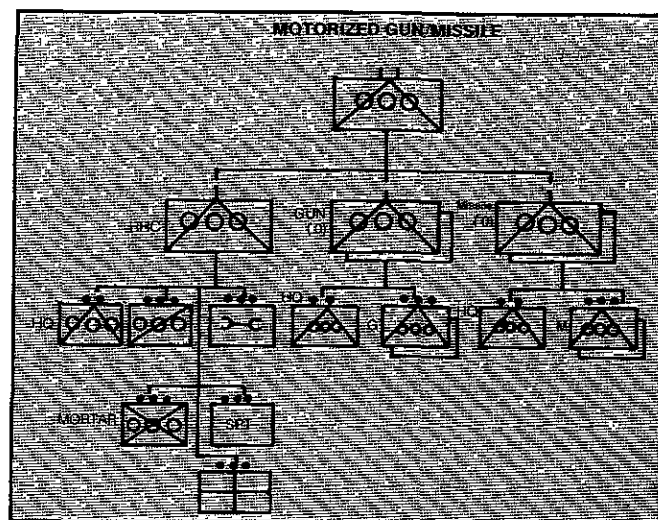


Figure 4

In cases where the tactical mobility of a tracked vehicle is not substantially better than that of the wheeled version, and where the enemy's motorized or heavy system can be dealt with effectively by wheeled systems, the answer seems obvious. Still, the economics of reducing the conventional force in Europe, freeing large numbers of M113 chassis systems for some other application, may become an overpowering argument for light tracked systems.

Developments on the horizon indicate we are going to have a small Army that must be able to respond quickly to a wide array of threats across an extended range of scenarios. Many of the possible battle theaters will be "come as you are parties," meaning no prepositioned equipment or bases and a reliance on strategic lift. To make matters worse, many of the potential opponents will have a significant number of motorized or heavy forces equipped with lethal, large caliber direct fire systems. These forces—deployed with reasonable com-

petence, dedication, and sustainment—will prove deadly if they are not responded to with competitive forces.

My conclusion is that motorized forces represent an effective solution to these challenges. I believe there is sufficient reason to pursue the organization of such a force, possibly on an experimental basis. If the Army is to achieve a versatile, deployable, and lethal force that can respond to threats across the battlefield spectrum of intensity, anywhere our worldwide interests may take us, it may be that heavy, *medium*, light, and special operations forces are the answer.

Lieutenant Colonel Thomas R. Rozman is assigned to the Office of the Deputy Chief of Staff for Training at the U.S. Army Training and Doctrine Command. He previously served on the Armored Family of Vehicles Task Force and in various mechanized infantry assignments. He is a 1970 graduate of the United States Military Academy and holds a master's degree from the University of Massachusetts.

